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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,801

11/21/2005

Masakazu Funahashi

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EXAMINER

GARRETT, DAWN L

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

07/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,801	Applicant(s) FUNAHASHI, MASAKAZU	
	Examiner Dawn Garrett	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :9-19-05, 8-23-07, 9-5-07, 10-31-07, 11-21-07, 6-18-08.

DETAILED ACTION

1. This application is a 371 of PCT/JP04/02945 filed 3/8/04. The preliminary amendment dated September 19, 2005 has been entered. Claims 11 and 12 were amended. Claims 1-12 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

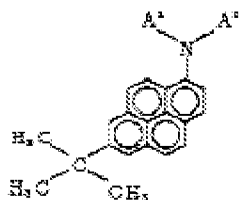
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

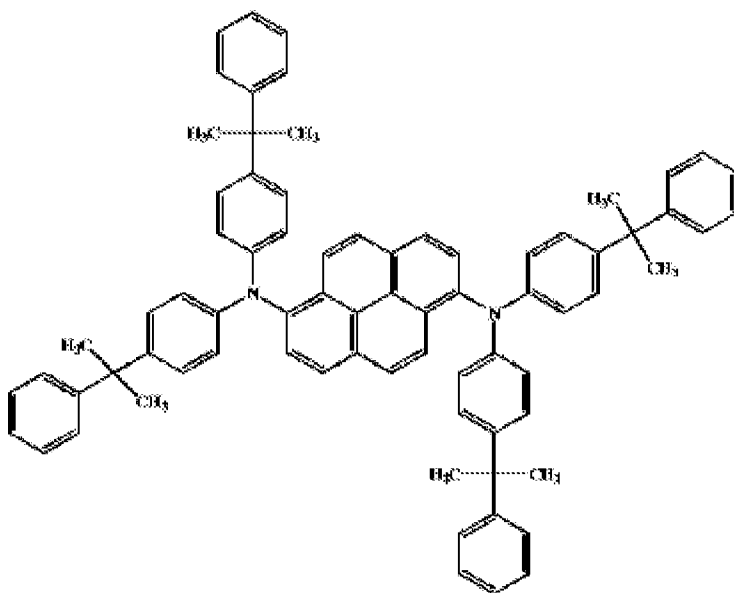
3. Claims 1, 3, 4, 6, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Onuma et al. (JP 05-021161 A). Onuma et al. teaches organic electroluminescent devices having at least one layer comprising formula I (see abstract and Examples):

[Chem 1]



In formula I, A is defined as set forth on page 5. The A groups may each comprise a phenyl groups substituted with a (branched) tert-butyl alkyl group.

4. Claims 1-6, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Onikubo et al. (US 6,280,859). Onikubo et al. discloses the following compound for a layer of an EL device (see abstract and Table 3, col. 65-66, compound 12):



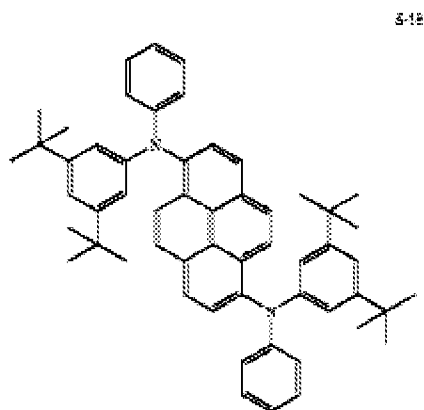
The instant A1 and A2 substituent group positions are substituted branched alkyl groups in the above formula.

5. Claims 1-10 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Seo et al. (US 2004/0137270 A1) or under 35 U.S.C. 102(a) as being anticipated by Seo et al. (EP 1437395) [Note: These are patent family equivalent documents. US publication referenced in the following rejection].

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

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Seo et al. discloses organic electroluminescent devices comprising amino-pyrene compounds as a dopant (see abstract). Seo et al. shows several specific compounds (see pages 7-23) that are within the definitions of the instant formulas including following compound "S-18" from page 10 of '270:



The above compound anticipates claims 1-9. With regard to claims 10 and 12, a light emitting layer for the device is incorporated using 0.1 to 49.9 wt. % of the dopant material according to formula 1 (see par. 27-29).

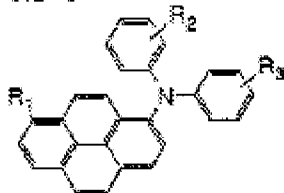
Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

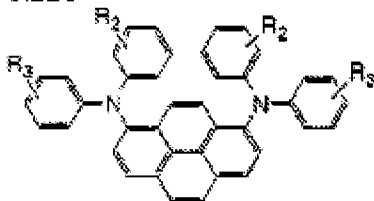
7. Claims 1-10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishimura et al. (JP 10-88122). Ichimura et al. discloses the following compounds for use in a layer of an organic electroluminescence element for forming a display (see page 2 and abstract):

【化1】

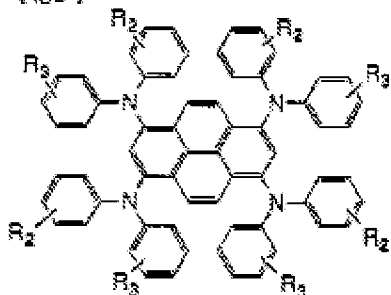


(1)

【化2】



【化3】

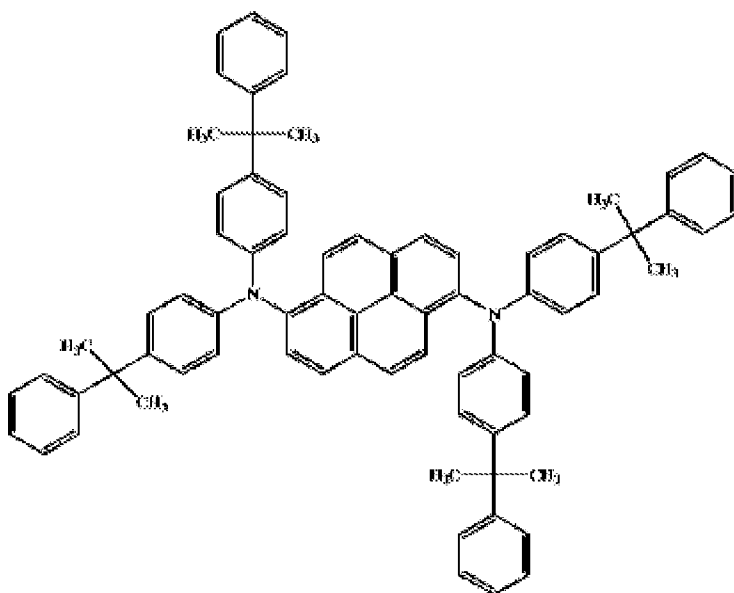


In the formulas (1), (2), and (3), R₁-R₃ may be an alkyl group such as ethyl, propyl or butyl or an alkoxy group such as ethoxy-based, propoxy-based or butoxy-based (see par. 14). The pyrene derivatives may be used in the electroluminescent layer (see abstract). Also, the pyrene derivatives may be used in the hole transport layer (see par. 18, 22, 25). Ichimura et al. does not *exemplify* compounds requiring the provisos of instant A1 and A2; however, Ichimura et al. does teach alkyl groups and alkoxy groups within the provisos are suitable (see par. 14). It would have been obvious to one of ordinary skill in the art at the time of the invention to have selected R₁-R₃ of the Ichimura compounds as alkyl groups of at least 2 carbon atoms (including branched) or cycloalkyl of 3 or more carbon atoms (including branched), because Ichimura

teaches these substituent groups and one would expect a hole transporting material that functions well in the Ichimura devices having excellent brightness and durability.

With regard to claims 7-9, Ichimura et al. does not expressly disclose R1-R3 may each comprise two substituent groups; however, it would have been obvious to one of ordinary skill in the art at the time of the invention to have substituted the phenyl groups with more than one R1-R3 each, because one would expect the materials to perform a similar function as a hole transporting material. Compounds having two substituents versus one substituent have a sufficiently close relationship such that one would expect the compounds to have similar properties.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Onikubo et al. (US 6,280,859). Onikubo et al. is relied upon as set forth above for the rejection of claim 1. Onikubo et al. discloses the following compound for a layer of an EL device (see abstract and Table 3, col. 65-66, compound 12):



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Examples “96-108” described at col. 195 set forth a device comprising a light emitting layer of Alq and a compound of Table 3 in a ratio of 100:3. Although compound 12 (above) of Table 3 is not expressly used in the Examples shown in col. 195, it would have been obvious to one of ordinary skill in the art at the time of the invention to have made a device having compound 12 in a layer in an amount of 3%, because Onikubo clearly sets forth selecting a compound from Table 3 for forming this type of layer in an EL device. One would expect compound 12 at an amount of 3% to result in a device having high brightness characteristics as set forth in the examples.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 21, and 22 of copending Application No. 10/617,397. Although the conflicting claims are not identical, they are not patentably distinct

from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '397. X3 of '397 may be pyrene. Ar5 and Ar6 of '397 may be substituted aromatic groups. Ar15-A18 of '397 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 28, 29, 31, 38, 39, 41, 49 of copending Application No. 11/207,933. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '933. X3 of '933 may be pyrene. Ar5 and Ar6 of '933 may be substituted aromatic groups. Ar15-A18 of '933 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 1-10 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 and 10 of copending Application No. 11/547,233. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '233. X of '233 may be pyrene. Ar2 and Ar3 of '233 may be substituted aromatic groups. Ar1-A4 of '233 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claims 1-10 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5, 9, 10, 14, 18 and 22 of copending Application No. 11/761,437. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '437. X3 of '437 may be pyrene. Ar5 and Ar6 of '437 may be substituted aromatic groups. Ar15-A18 of '437 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7, 9, 10, and 13-16 of copending Application No. 11/269,661. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '661. P of '661 may be pyrene. Ar1-Ar4 of '661 may be substituted aromatic groups.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

15. Claims 1-10 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-8, 10, and 12 of copending Application No. 11/547,306. Although the conflicting claims are not identical, they are not

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patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '306. X of '306 may be pyrene. R20 and R21 of '306 may be substituted aromatic groups. Ar1 to Ar4 of '306 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No.

11/596,299. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '299. Ar1-Ar4 of '299 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

17. Claims 1-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No.

11/575,441. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compounds of the instant claims are within the definition for the amine compounds of an EL device of '441. Ar1-Ar4 of '441 are substituent groups that may be present in a number of 2 or greater.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dawn Garrett/
Primary Examiner, Art Unit 1794

July 28, 2008